

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-9. (Cancelled)

10. (Currently amended) A method of treating ~~acute promyelocytic~~ leukemia in humans comprising the steps of:

- (a) preparing an stabilized aqueous solution ~~consisting of~~ comprising approximately 0.1% to 1.0% by weight arsenic trioxide ~~and at least one pH-buffering agent selected from the group consisting of hydrochloric acid, alkali hydroxide, and carbonate solutions;~~
- (b) sterilizing said aqueous solution to form an injectably administrable ~~acute promyelocytic~~ leukemia treating composition; and
- (c) administering said composition ~~as an intravenously drip~~ to a human in need of treatment for ~~acute promyelocytic~~ leukemia.

11. (Currently amended) The method of claim 10, wherein the leukemia treated is acute promyelocytic leukemia ~~at least one pH-buffering agent comprises hydrochloric acid and sodium hydroxide.~~

12. (Currently amended) A method of treating leukemia in humans comprising the steps of:

- (a) preparing an aqueous solution ~~consisting of~~ comprising approximately 0.1% to 1.0% by weight arsenic trioxide, 0.8% by weight sodium chloride and 10% by weight glucose ~~at least one pH-buffering agent selected from the group consisting of hydrochloric acid, alkali hydroxide, and carbonate solutions;~~
- (b) sterilizing said aqueous solution to form an injectably administrable leukemia treating composition; and

(c) administering said composition as an intravenous drip to a human in need of treatment for leukemia.

13. (Cancelled)

14. (Cancelled)

15. (Previously presented) The method of claim 12, wherein step (c) is repeated on a daily basis for approximately 2 to 4 weeks.

16. (Previously presented) The method of claim 12, further comprising, after the administering step, ceasing administration of the composition.

17. (Previously presented) The method of claim 16, wherein the administration and ceasing steps are repeated on a daily basis for approximately 2 to 4 weeks.

18. (New) The method of claim 10, wherein the aqueous solution further comprises a pH-buffering agent.

19. (New) The method of claim 18, wherein the aqueous solution further comprises at least one pH-buffering agent selected from the group consisting of hydrochloric acid, alkali hydroxide, and carbonate solutions.

20. (New) The method of claim 19, wherein the at least one pH-buffering agent is selected from the group consisting of hydrochloric acid and sodium hydroxide.

21. (New) The method of claim 10, wherein the aqueous solution further comprises 0.8% by weight sodium chloride.

22. (New) The method of claim 12, wherein the aqueous solution further comprises a pH-buffering agent.

23. (New) The method of claim 22, wherein the aqueous solution further comprises at least one pH-buffering agent selected from the group consisting of hydrochloric acid, alkali hydroxide, and carbonate solutions

24. (New) The method of claim 23, wherein the aqueous solution further comprises at least one pH-buffering agent selected from the group consisting of hydrochloric acid and sodium hydroxide.

25. (New) An intravenous solution for treating humans having leukemia comprising approximately 0.1% to 1.0% by weight arsenic trioxide, 0.8% by weight sodium chloride and 10% by weight glucose.

26. (New) The intravenous solution of claim 24, further comprising a pH buffer.

27. (New) A method of treating leukemia in humans comprising the steps of:  
a) preparing a physiologically acceptable aqueous solution of arsenic trioxide in a pharmaceutically effective amount;

b) sterilizing said aqueous solution to form an injectably administrable leukemia treating composition; and

(c) administering said composition intravenously to a human in need of treatment for leukemia.

28. (New) A physiologically acceptable pharmaceutically effective aqueous solution comprising arsenic trioxide and at least one stabilizing agent.